



12AE6-A

TWIN DIODE—MEDIUM-MU TRIODE

7-PIN MINIATURE TYPE

For use in automobile-radio receivers operating directly
from 12-volt storage batteries

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GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage range. 10 to 15.9 dc volts

This voltage range is on an absolute basis. For longest life, it is recommended that the heater be operated within the voltage range of 11 to 14 volts.

Current (Approx.)

at 12.6 volts. 0.15 amp

Direct Interelectrode Capacitances (Approx.):⁰

Triode grid to triode plate. 2 μ f

Triode grid to cathode and heater. 1.8 μ f

Triode plate to cathode and heater. 1.1 μ f

Plate of diode unit No.1 to plate of
diode unit No.2. 0.9 μ f

Characteristics, Class A₁ Amplifier (Triode Unit):

Heater Voltage 12.6 12.6 volts

Plate Voltage. 12.6 12.6 volts

Grid Voltage — 0 volts

Grid Resistor. 10 — megohms

Amplification Factor 14.3 16.7

Plate Resistance (Approx.) 20000 13000 ohms

Transconductance 715 1300 μ hos

Plate Current. 0.32 1 ma

Mechanical:

Operating Position Any

Maximum Overall Length 2-1/8"

Maximum Seated Length. 1-7/8"

Length, Base Seat to Bulb Top (Excluding tip). 1-1/2" $\pm$ 3/32"

Diameter 0.650" to 0.750"

Dimensional Outline. See General Section

Bulb T5-1/2

Base Small-Button Miniature 7-Pin (JEDEC No.E7-1)

Basing Designation for BOTTOM VIEW 7BT

Pin 1—Grid of

Triode Unit

Pin 2—Cathode of

Triode Unit

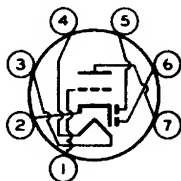
and Diode

Units No.1

and No.2

Pin 3—Heater

Pin 4—Heater



Pin 5—Plate of

Diode

Unit No.2

Pin 6—Plate of

Diode

Unit No.1

Pin 7—Plate of

Triode

Unit

⁰: without external shield.

12AE6-A



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TRIODE UNIT — AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE.	30 max.	volts
CATHODE CURRENT.	20 max.	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	30 max.	volts
Heater positive with respect to cathode.	30 max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance.	10 max.	megohms
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DIODE UNITS — Two

Maximum Ratings, Design-Center Values:

Values are for Each Unit

PLATE CURRENT.	1 max.	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	30 max.	volts
Heater positive with respect to cathode.	30 max.	volts

Characteristics:

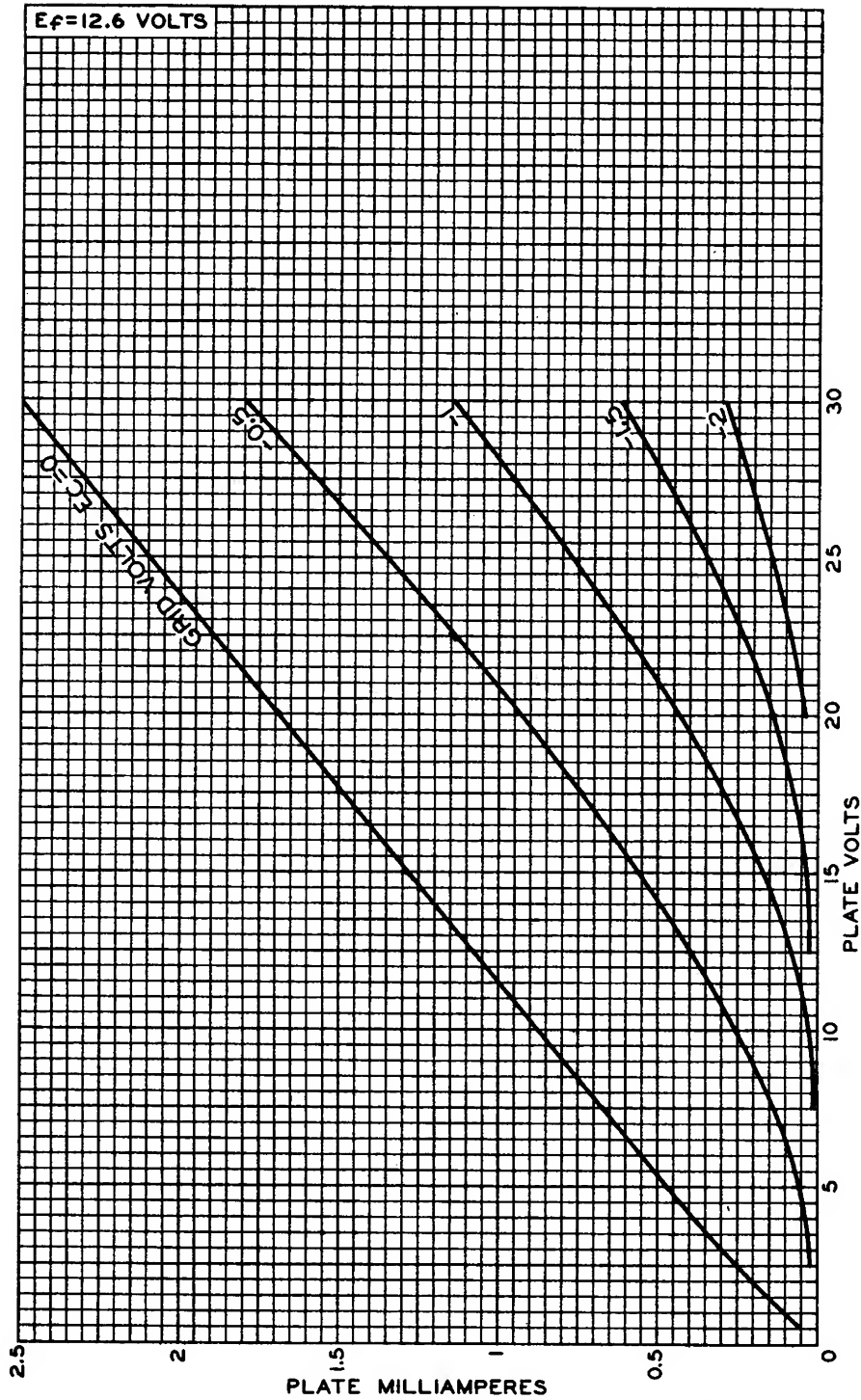
Heater Voltage	12.6	volts
Plate Voltage.	10	volts
Plate Current.	2	ma



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AVERAGE PLATE CHARACTERISTICS
TRIODE UNIT

12AE6-A



ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-9915

2AE6-A



12AE6-A

AVERAGE CHARACTERISTICS
TRIODE UNIT

